



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/539,394    03/31/00    MCCARTHY

J    199-1452

EXAMINER

PM82/0917

JOHN G CHUPS  
CHUPS & ALBERTI P C  
31313 NORTHWESTERN HIGHWAY  
SUITE205  
FARMINGTON HILLS MI 48334

AVERY, B

ART UNIT

PAPER NUMBER

3618  
DATE MAILED:

09/17/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/539,394**

Applicant(s)  
**McCarthy, James Paul**

Examiner  
**Bridget Avery**

Art Unit  
**3618**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jun 28, 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20) ☐ Other: \_\_\_\_\_

Art Unit: 3618

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujisawa et al. (US Patent 6,175,785).

Fujisawa et al. discloses a hybrid vehicle drive system including a generator (5) operatively connected to the engine (1) to produce a reaction torque, effective to control a first speed; a clutch (2) assembly selectively coupled to the generator (5) to selectively augment the reaction torque, thereby cooperating with the generator (5) to control the first speed; and a controller (10) which is coupled to the generator (5), engine (1), and to the clutch assembly (2), the controller (10) being effective to determine the amount of reaction torque required to control the first speed,

Art Unit: 3618

based upon the amount of reaction torque, to cause the generator (5) and clutch assembly (2) to cooperatively provide the reaction torque. See column 1, lines 36-40 and column 2, lines 36-51.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujisawa et al. ('785) in view of Sumi (US Patent 6,054,776).

Fujisawa et al. discloses the feature described above.

Fujisawa et al. is silent regarding the type of clutch used and fails to show a valve assembly.

Sumi discloses a hybrid electric vehicle including an engine (1) having an output shaft; a motor/generator (2) coupled, by a planetary gear set (35), to the engine (1) which produces a reaction torque; a controller; and, a clutch assembly (36) coupled to the generator (2); the clutch (36) is coupled to a source of pressurized fluid by an actuatable valve assembly (36a) and the controller is effective to actuate the valve assembly.

Art Unit: 3618

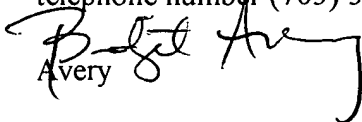
Based on the teachings of Sumi, it would have been obvious to one having ordinary skill in the art, at the time of the applicant's invention to modify the system of Fujisawa et al. to include a clutch assembly coupled to a source of pressurized fluid and a valve assembly to provide a conventional hydraulically operated clutch assembly. With respect to claim 5, the provision of a planetary gear set coupling a generator to an engine is conventional in the art and would have been obvious to one having ordinary skill in the art. With respect to claim 8, motor/generators are conventionally designed to include a stator and rotor assembly. With respect to claims 14-19, the method for controlling the speed of an engine, which includes selectively activating the generator to produce a negative torque and selectively and frictionally engaging a rotor assembly to lower the speed of the engine is obvious in view of Fujisawa et al. and Sumi.

### *Conclusion*


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tsuzuki et al. shows a control system for vehicular drive unit.

6. Any inquiry concerning this communication should be directed to Bridget Avery at telephone number (703) 308-2086.

  
Avery

September 10, 2001

  
BRIAN L. JOHNSON  
SUPERVISOR/ENGINEER  
TECHNOLOGY CENTER  
9/10/01